



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450


Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,500	05/18/2005	Mitsuru Eida	HEIW:047	8517
27890 7590 07/09/2008 STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036				
EXAMINER MACCHIAROLO, PETER J				
ART UNIT		PAPER NUMBER		
2879				
MAIL DATE		DELIVERY MODE		
07/09/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Search Notes 	Application/Control No. 10529500	Applicant(s)/Patent Under Reexamination EIDA ET AL.
	Examiner PETER J MACCHIAROLO	Art Unit 2879

SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
updated search	7/4/08	pjm

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

DETAILED ACTION

Response to Amendment

The reply filed on 04/10/2008 consists of changes to the claims, and further, the reply consists of remarks related to the prior rejection of claims in the previous Office Action. The above have been entered and considered. However, pending claims 1, 2, 4-6 and 8-14 are not allowable as explained below.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 04/30/2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the intermediate layer between the first and second passivation layer (see at least claim 1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

Art Unit: 2879

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 4 is objected to because of the following informalities:

Claim 4 depends on canceled claim 3. The Examiner interprets that claim 4 depends on claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Park et al (USPGPUB 20030146696: “Park”).

Regarding claim 1, Park discloses at least in figure 4 an organic electroluminescent display comprising: a supporting substrate (100); an organic electroluminescent element (160); a first passivation layer (180); an intermediate layer (300); a second passivation layer (250); a color conversion layer (240) for adjusting and/or converting the color of a light emitted from the organic electroluminescent element; and a transparent substrate (200) formed in sequence.

Claim 8-10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki et al (USPN 6445005: “005”).

Regarding claims 8, ‘005 discloses at least in figure 1 an organic electroluminescent display comprising: a supporting substrate (101); a thin film transistor (103); an organic electroluminescent element (107); a first passivation layer (109); a second passivation layer (114); a color conversion layer (113a) for adjusting and/or converting the color of a light emitted from the organic electroluminescent element; and a transparent substrate (110) formed in

sequence, with the second passivation layer being formed of a transparent inorganic material (see at least col. 4, ll. 53-60.

Regarding claim 9, '005 discloses the first passivation layer (109) is formed of a transparent inorganic material (silicon nitride).

Regarding claim 10, '005 discloses in at least col. 11 ll. 35-41 and col. that that $0.001\mu\text{m} < T1+T2 < 200\mu\text{m}$.

Regarding claim 13, '005 discloses at least in the embodiment of figure 6 the color conversion layer (113) comprises a fluorescent medium.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-6, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over previously cited Eida et al (USPN 5909081; "Eida") in view of Yamazaki et al (USPGPUB 20020057055; "Yamazaki") in further view of '005.

Regarding claims 1 and 4, Eida discloses at least in figure 6 an organic electroluminescent display comprising: a supporting substrate (2); an organic electroluminescent

element (1); a first gap (6); a second passivation layer (10); a color conversion layer (3) for adjusting and/or converting the color of a light emitted from the organic electroluminescent element; and a transparent substrate (4) formed in sequence.

Eida is silent a first passivation layer or that the first gap is an intermediate layer.

However, Yamazaki teaches in at least figure 9 that forming a first passivation layer (406) over an organic EL element protects the element and elongates the overall lifetime of the device.

Furthermore, '005 teaches in at least col. 4, ll. 53-60 that an open gap similar to Eida's gap, may be filled with an intermediate layer of an inert fluid or adhesive, thereby increasing the device's water blocking abilities.

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Eida with Yamazaki's first passivation layer and filling Eida's gap with an inert fluid to increase the device's water blocking abilities and overall lifetime.

Regarding claim 2, Eida discloses in at least the embodiment of figure 14 in the abstract that $0.001\mu\text{m} < T1+T2 < 200\mu\text{m}$.

Regarding claim 5, Eida discloses at least in the embodiment of figure 6 the color conversion layer (3) comprises a fluorescent medium.

Regarding claims 6 and 14, the structural limitations therein are the same as those recited in claims 1, 2, 4 and 5, as rejected by Eida, Yamazaki and '005 above.

Eida, Yamazaki and '005 are silent to a method of fabricating the organic EL display device.

However, one skilled in the art will recognize that manufacturing Eida's device will comprise Applicant's recited steps of forming and attaching. Since only generic method steps and no specific method steps are claimed, the structure taught by Eida, Yamazaki and '005 meets Applicant's recited method step limitations.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the OLED of Eida, Yamazaki and '005 with the method of claim 6, since the method steps are obvious in light of the resultant structure.

Claim 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over '005 in view of Yamazaki.

Regarding claim 11, '005 is silent to an intermediate layer between the first and second passivation layer.

However, Yamazaki teaches in at least fig. 9; 406 that this configuration protects the element and elongates the overall lifetime of the device.

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of '005 with the intermediate layer of Yamazaki to protect the element and elongate the overall lifetime of the device.

Regarding claim 12, Yamazaki is silent to the intermediate layer comprising an inert fluid.

However, as is well-known in the art, this configuration will prevent moisture from penetrating into the EL display, thereby increasing the durability of the device. This is evidenced in at least '005.

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of '005 with the intermediate layer comprising an inert liquid to increase the durability of the device.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375. The examiner can normally be reached on 8:30 - 5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

/Peter Macchiarolo/
Primary Examiner, Art Unit 2879
(571) 272-2375

Office Action Summary

Application No.

10/529,500

Applicant(s)

EIDA ET AL.

Examiner

PETER J. MACCHIAROLO

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6 and 8-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2,4-6 and 8-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 04/30/2008
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Notice of References Cited

Application/Control No.

10/529,500

Applicant(s)/Patent Under
Reexamination
EIDA ET AL.

Examiner

PETER J. MACCHIAROLO

Art Unit

2879

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0146696	08-2003	Park et al.	313/506
*	B	US-6,445,005	09-2002	Yamazaki et al.	257/72
*	C	US-5,909,081	06-1999	Eida et al.	313/504
*	D	US-2002/0057055	05-2002	Yamazaki et al.	313/506
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.